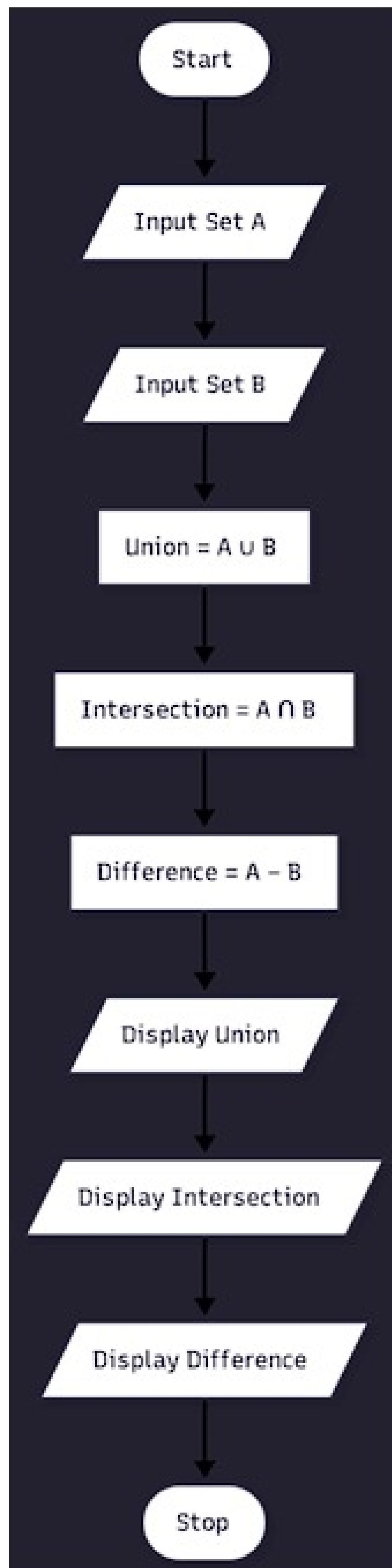


Algorithm: Set Operations (Union, Intersection, Difference)

1. **Start**
2. **Input Set A**
3. **Input Set B**
4. **Compute Union**
 - o Union = $A \cup B$
5. **Compute Intersection**
 - o Intersection = $A \cap B$
6. **Compute Difference**
 - o Difference = $A - B$
7. **Display Union**
8. **Display Intersection**
9. **Display Difference**
10. **Stop**



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Programming and Problem Solving

Lab - TE7287 - II Sem - 2026

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1. Experiment - 1

2. Experiment - 2

3. Experiment - 3

4. Experiment - 4

4.1. Programs

4.1.1. Set Operations

5. Experiment - 5

5.1. Programs

5.1.1. Leap Year Checker

5.1.2. Student Grade Based on Aggregate

6. Experiment - 6

6.1. Programs

6.1.1. Incremented Date

6.1.2. Factorial of a Number

7. Experiment - 7

8. Experiment - 8

9. Experiment - 9

10. Experiment - 10

11. Experiment - 11

4.1.1. Set Operations

18:05

Write a Python program to perform union, intersection and difference operations on *Set A* and *Set B*.

Input Format:

- First Line prompts "Set A: " followed by space-separated list of integers for *Set A*.
- The second input prompts "Set B: " followed by space-separated list of integers for *Set B*.

Output Format:

- The first line prints "Union: " followed by the union of *Set A* and *Set B*.
- The second line prints "Intersection: " followed by the intersection of *Set A* and *Set B*.
- The third line prints "Difference: " followed by the difference of *Set A* and *Set B*.

Note:

- If there is no intersection between the two sets, the program prints an empty set, which appears as "set()" in the output.
- Please refer to the visible test cases for better understanding.

Sample Test Cases

setoperat...

Submit

1

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12

13

Type Content here...

set_a = set (map(int, input("Set A: ").split()))

set_b = set (map(int, input("Set B: ").split()))

union_set = set_a | set_b

intersection_set = set_a & set_b

difference_set = set_a - set_b

print("Union:", union_set)

print("Intersection:", intersection_set)

print("Difference:", difference_set)

Terminal

Test cases

< Prev

Reset

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10:20